



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

General Permit No.: VAN010022
Effective Date: January 1, 2012

Expiration Date: December 31, 2016

**GENERAL PERMIT FOR TOTAL NITROGEN AND TOTAL PHOSPHORUS DISCHARGES AND NUTRIENT
TRADING IN THE CHESAPEAKE WATERSHED IN VIRGINIA**

**AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND THE VIRGINIA STATE WATER CONTROL LAW**

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of facilities holding a VPDES individual permit or owners of facilities that otherwise meet the definition of an existing facility, with total nitrogen and/or total phosphorus discharges to the Chesapeake Bay or its tributaries, are authorized to discharge to surface waters and exchange credits for total nitrogen and/or total phosphorus.

The authorized discharge shall be in accordance with the registration statement filed with DEQ, this cover page, Part I-Special Conditions Applicable to All Facilities, Part II-Special Conditions Applicable to New and Expanded Facilities, and Part III-Conditions Applicable to All VPDES Permits, as set forth herein.

Part I
Special Conditions Applicable To All Facilities

A. Authorized activities.

1. Authorization to discharge for facilities required to register.

a. Every owner or operator of a facility required to submit a registration statement to the department by November 1, 2011, and thereafter upon the reissuance of this general permit, shall be authorized to discharge total nitrogen and total phosphorus subject to the requirements of this general permit upon the department's approval of the registration statement.

b. Any owner or operator of a facility required to submit a registration statement with the department at the time he makes application with the department for a new discharge or expansion that is subject to an offset or technology-based requirement in Part II of this general permit, shall be authorized to discharge total nitrogen and total phosphorus subject to the requirements of this general permit upon the department's approval of the registration statement.

c. Upon the department's approval of the registration statement, a facility will be included in the registration list maintained by the department.

2. Authorization to discharge for facilities not required to register. Any facility authorized by a Virginia Pollutant Discharge Elimination System permit and not required by this general permit to submit a registration statement shall be deemed to be authorized to discharge total nitrogen and total phosphorus under this general permit at the time it is issued. Owners or operators of facilities that are deemed to be permitted under this subsection shall have no obligation under this general permit prior to submitting a registration statement and securing coverage under this general permit based upon such registration statement.

3. Continuation of permit coverage.

a. Any owner authorized to discharge under this general permit and who submits a complete registration statement for the reissued general permit by November 1, 2016, in accordance with Part III A or who is not required to register in accordance with Part I A 2 is authorized to continue to discharge under the terms of this general permit until such time as the board either:

(1) Issues coverage to the owner under the reissued general permit, or

(2) Notifies the owner that coverage under the reissued permit is denied.

b. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the board may choose to do any or all of the following:

(1) Initiate enforcement action based upon the general permit that has been continued,

(2) Issue a notice of intent to deny coverage under the amended general permit if the general permit coverage is denied the owner would then be required to cease the activities authorized by the continued general permit or be subject to enforcement action for operating without a permit, or

(3) Take other actions authorized by the State Water Control Law.

B. Waste load allocations.

1. Waste load allocations allocated to permitted facilities pursuant to 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, or applicable total maximum daily loads, or waste load allocations acquired by new and expanding facilities to offset new or increased delivered total nitrogen and delivered total phosphorus loads from a new discharge or expansion under Part II B of this general permit, and existing loads calculated from the permitted design capacity of expanding facilities not previously covered by this general permit, shall be incorporated into

the registration list maintained by the department. The waste load allocations contained in this list shall be enforceable as annual mass load limits in this general permit. Credits shall not be generated by facilities whose mass loads are derived from permitted design capacities, or from facilities whose operations were previously authorized by a Virginia Pollution Abatement (VPA) permit that was issued before July 1, 2005.

2. Except as described in subdivisions 2 d and 2 e of this subsection, an owner or operator of two or more facilities covered by this general permit and located in the same tributary may apply for and receive an aggregated mass load limit for delivered total nitrogen and an aggregated mass load limit for delivered total phosphorus reflecting the total of the water quality-based total nitrogen and total phosphorus waste load allocations or permitted design capacities established for such facilities individually.

a. The permittee (and all of the individual facilities covered under a single registration) shall be deemed to be in compliance when the aggregate mass load discharged by the facilities is less than the aggregate load limit.

b. The permittee will be eligible to generate credits only if the aggregate mass load discharged by the facilities is less than the total of the waste load allocations assigned to any of the affected facilities in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C and 9VAC25-720-120 C of the Water Quality Management Planning Regulation.

c. Credits shall not be generated by permittees whose aggregated mass load limit is derived entirely from permitted design capacities.

d. The aggregation of mass load limits shall not affect any requirement to comply with local water quality-based limitations.

e. Facilities whose operations were previously authorized by a Virginia Pollution Abatement (VPA) permit that was issued before July 1, 2005, cannot be aggregated with other facilities under common ownership or operation.

f. Operation under an aggregated mass load limit in accordance with this section shall not be deemed credit acquisition as described in Part I J 2 of this general permit.

3. An owner who consolidates two or more facilities located in the same tributary into a single regional facility may apply for and receive an aggregated mass load limit for delivered total nitrogen and an aggregated mass load limit for delivered total phosphorus, subject to the following conditions:

a. If all of the affected facilities have waste load allocations in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, the aggregate mass load limit shall be calculated by adding the waste load allocations of the affected facilities. The regional facility shall be eligible to generate credits.

b. If any, but not all, of the affected facilities has a waste load allocation in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, the aggregate mass load limit shall be calculated by adding:

(1) Waste load allocations of those facilities that have waste load allocations in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation;

(2) Permitted design capacities assigned to affected industrial facilities; and

(3) Loads from affected sewage treatment works that do not have a waste load allocation in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, defined as the lesser of a previously calculated permitted design capacity, or the values calculated by the following formulae:

Nitrogen Load (lbs/day) = flow x 8.0 mg/l x 8.345 x 365 days/year

Phosphorus Load (lbs/day) = flow x 1.0 mg/l x 8.345 x 365 days/year

Flows used in the preceding formulae shall be the design flow of the treatment works from which the affected facility currently discharges.

The regional facility shall be eligible to generate credits.

c. If none of the affected facilities have a waste load allocation in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, the aggregate mass load limit shall be calculated by adding the respective permitted design capacities for the affected facilities. The regional facility shall not be eligible to generate credits.

d. Facilities whose operations were previously authorized by a Virginia Pollution Abatement (VPA) permit that was issued before July 1, 2005, may be consolidated with other facilities under common ownership or operation, but their allocations cannot be transferred to the regional facility.

e. Facilities whose operations were previously authorized by a VPA permit that was issued before July 1, 2005, can become regional facilities, but they cannot receive additional allocations beyond those permitted in Part II B 1 d of this general permit.

4. Unless otherwise noted, the nitrogen and phosphorus waste load allocations assigned to permitted facilities are considered total loads including nutrients present in the intake water from the river, as applicable. On a case-by-case basis, an industrial discharger may demonstrate to the satisfaction of the board that a portion of the nutrient load originates in its intake water. This demonstration shall be consistent with the assumptions and methods used to derive the allocations through the Chesapeake Bay models. In these cases, the board may limit the permitted discharge to the net nutrient load portion of the assigned waste load allocation.

5. Bioavailability. Unless otherwise noted, the entire nitrogen and phosphorus waste load allocations assigned to permitted facilities are considered to be bioavailable to organisms in the receiving stream. On a case-by-case basis, a discharger may demonstrate to the satisfaction of the board that a portion of the nutrient load is not bioavailable; this demonstration shall not be based on the ability of the nutrient to resist degradation at the wastewater treatment plant, but instead, on the ability of the nutrient to resist degradation within a natural environment for the amount of time that it is expected to remain in the bay watershed. This demonstration shall also be consistent with the assumptions and methods used to derive the allocations through the Chesapeake Bay models. In these cases, the board may limit the permitted discharge to the bioavailable portion of the assigned waste load allocation.

C. Schedule of compliance.

1. The following schedule of compliance pertaining to the load allocations for total nitrogen and total phosphorus applies to the facilities listed in 9VAC25-820-80.

a. Compliance shall be achieved as soon as possible, but no later than the following dates, subject to any compliance plan-based adjustment by the board pursuant to subdivision 1 b of this subsection, for each parameter:

Tributary	Parameter	Final Effluent Limits Effective Date
James River	Nitrogen	January 1, 2017
York River	Phosphorus	January 1, 2016

b. Following submission of compliance plans and compliance plan updates required by 9VAC25-820-40, the board shall reevaluate the schedule of compliance in subdivision 1 a of this subsection, taking into account the information in the compliance plans and the factors in § 62.1-44.19:14 C 2 of the Code of Virginia. When warranted based on such information and factors, the board shall adjust the schedule in subdivision 1 a of this subsection as appropriate by modification or reissuance of this general permit.

2. The registration list shall contain individual dates for compliance (as defined in Part I J 1 a-b of this general permit) for dischargers, as follows:

a. Facilities listed in 9VAC25-820-80 will have individual dates for compliance based on their respective compliance plans, that may be earlier than the basin schedule listed in subdivision 1 of this subsection.

b. Facilities listed in 9VAC25-820-70 that waive their compliance schedules in accordance with 9VAC25-820-40 A 2 b shall have an individual compliance date of January 1, 2012.

c. Upon completion of the projects contained in their compliance plans, facilities listed in 9VAC25-820-80 may receive a revised individual compliance date of January 1 for the calendar year immediately following the year in which a Certificate to Operate was issued for the capital projects, but not later than the basin schedule listed in subdivision 1 of this subsection.

d. New and expanded facilities will have individual dates for compliance corresponding to the date that coverage under this general permit was extended to the facility.

3. The 39 significant dischargers in the James River Basin shall meet aggregate discharged waste load allocations of 8,968,864 lbs/yr TN and 545,558 lbs/yr TP by January 1, 2023.

D. Annual update of compliance plan. Every owner or operator of a facility required to submit a registration statement shall either individually or through the Virginia Nutrient Credit Exchange Association submit updated compliance plans to the department no later than February 1 of each year. The compliance plans shall contain sufficient information to document a plan for the facility to achieve and maintain compliance with applicable total nitrogen and phosphorus individual waste load allocations on the registration list and aggregate waste load allocations in Part I C 3. Compliance plans for facilities that were required to submit a registration statement with the department under Part I G 1 a may rely on the acquisition of point source credits in accordance with Part I J of this general permit, but not the acquisition of credits through payments into the Water Quality Improvement Fund, to achieve compliance with the individual and combined waste load allocations in each tributary. Compliance plans for expansions or new discharges for facilities that are required to submit a registration statement with the department under Part I G 1 b and c may rely on the acquisition of allocation in accordance with Part II B of this general permit to achieve compliance with the individual and combined waste load allocations in each tributary.

E. Monitoring requirements.

1. Discharges shall be monitored by the permittee during weekdays as specified below unless the department determines that weekday only sampling results in a non-representative load. Weekend monitoring and/or alternative monthly load calculations to address production schedules or seasonal flows shall be submitted to the department for review and approval on a case-by-case basis. Facilities that exhibit instantaneous discharge flows that vary from the daily average discharge flow by less than 10% may submit a proposal to the department to use an alternative sample type; such proposals shall be reviewed and approved by the department on a case-by-case basis.

Parameter	Sample Type and Collection Frequency			
STP design flow	≥20.0 MGD	1.0-19.999 MGD	0.040-0.999 MGD	< 0.040 MGD
Effluent TN load limit for industrial facilities		>100,000 lb/yr	487-99,999 lb/yr	< 487 lb/yr
Effluent TP load limit for industrial facilities		>10,000 lb/yr	37-9,999 lb/yr	< 37 lb/yr
Flow	Totalizing, Indicating and Recording			1/Day, see individual VPDES permit for sample type
Nitrogen Compounds (Total Nitrogen = TKN + NO ₂ ⁻ (as N) + NO ₃ ⁻ (as N))	24 HC 3 Days/Week	24 HC 1/Week	8 HC 2/Month, > 7 days apart	1/Month Grab
Total Phosphorus	24 HC 3 Days/Week	24 HC 1/Week	8 HC 2/Month, > 7 days apart	1/Month Grab

2. Monitoring for compliance with effluent limitations shall be performed in a manner identical to that used to determine compliance with effluent limitations established in the individual VPDES permit. Monitoring or sampling shall be conducted according to analytical laboratory methods approved under 40 CFR Part 136, unless other test or sample collection procedures have been requested by the permittee and approved by the department in writing. All analysis for compliance with effluent limitations shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. Monitoring may be performed by the permittee at frequencies more stringent than listed above; however, the permittee shall report all results of such monitoring.

3. Loading values greater than or equal to 10 pounds reported in accordance with Part I E and F of this general permit shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading values of less than 10 pounds reported in accordance with Part I E and F of this general permit shall be calculated and reported to at least two significant digits with the exception that all complete calendar year annual loads shall be reported to the nearest pound.

4. Data shall be reported on a form provided by the department, by the same date each month as is required by the facility's individual permit. The total monthly load shall be calculated in accordance with the following formula:

$$ML = \left(\frac{\sum DL}{s} \right) \times d$$

where:

ML = total monthly load (lb/mo) = average daily load for the calendar month multiplied by the number of days of the calendar month on which a discharge occurred

DL = daily load = daily concentration (expressed as mg/l to the nearest 0.01 mg/l) multiplied by the flow volume of effluent discharged during the 24-hour period (expressed as MGD to at least the nearest 0.01 MGD and in no case less than two significant digits), multiplied by 8.345. Daily loads greater than or equal to 10 pounds may be rounded to the nearest whole number to convert to pounds per day (lbs/day). Daily loads less than or equal to 10 pounds may be rounded to no fewer than two significant figures.

s = number of days in the calendar month in which a sample was collected and analyzed

d = number of discharge days in the calendar month

For total phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported. If all data are below the QL, then the average shall be reported as half the QL.

For total nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, nitrates/nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point as reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

The total year-to-date mass load shall be calculated in accordance with the following formula:

$$AL_{YTD} = \sum_{Jan \text{ present}} ML$$

where:

AL-YTD = calendar year-to-date annual load (lb/yr)

ML = total monthly load (lb/mo)

5. The department may authorize a chemical usage evaluation as an alternative means of determining nutrient loading for outfalls where the only source of nutrients is those found in the surface water intake and chemical additives used by the facility. Such an evaluation shall be submitted to the department for review and approval on a case-by-case basis. Implementation of approved chemical usage evaluations shall satisfy the requirements specified under Part I E 1 and 2.

F. Annual reporting.

1. Annually, on or before February 1, the permittee shall either individually or through the Virginia Nutrient Credit Exchange Association file a report with the department, using a reporting form supplied by the department. The report shall identify:

- a. The annual mass load of total nitrogen and the annual mass load of total phosphorus discharged by each of its permitted facilities during the previous calendar year;
- b. The delivered total nitrogen load and delivered total phosphorus load discharged by each of its permitted facilities during the previous year; and
- c. The number of total nitrogen and total phosphorus credits for the previous calendar year to be acquired or eligible for exchange by the permittee.

The total annual mass load shall be calculated in accordance with the following formula:

$$AL = \sum_{(Jan-Dec)} ML$$

where:

AL = calendar year annual load (lb/yr)

ML = total monthly load (lb/mo)

G. Requirement to register; exclusions.

1. The following owners or operators are required to register for coverage under this general permit:

a. Every owner or operator of an existing facility authorized by a Virginia Pollutant Discharge Elimination System permit to discharge 100,000 gallons or more per day from a sewage treatment work, or an equivalent load from an industrial facility, directly into tidal waters, or 500,000 gallons or more per day from a sewage treatment work, or an equivalent load from an industrial facility, directly into nontidal waters, shall submit a registration statement to the department by November 1, 2011, and thereafter upon the reissuance of this general permit in accordance with Part III B. The conditions of this general permit will apply to such owner and operator upon approval of a registration statement.

b. Any owner or operator of a facility authorized by a Virginia Pollutant Discharge Elimination System permit to discharge 40,000 gallons or more per day from a sewage treatment work, or an equivalent load from an industrial facility, directly into tidal or nontidal waters shall submit a registration statement with the department at the time he makes application for an individual permit with the department for a new discharge or expansion that is subject to an offset requirement in Part II of this general permit or technology-based requirement in 9VAC25-40-70, and thereafter upon the reissuance of this general permit in accordance with Part III B. The conditions of this general permit will apply to such owner or operator beginning on the start of the calendar year immediately following approval of a registration statement and issuance or modification of the individual permit.

c. Any owner or operator of a facility treating domestic sewage authorized by a Virginia Pollutant Discharge Elimination System permit with a discharge greater than 1,000 gallons per day up to and including 39,999 gallons per day that has not commenced the discharge of pollutants prior to January 1, 2011, shall submit a registration statement with the department at the time he makes application for an individual permit with the department or prior to commencing a discharge, whichever occurs first, and thereafter upon the reissuance of this general permit in accordance with Part III B.

2. All other categories of discharges are excluded from registration under this general permit.

H. Registration statement.

1. The registration statement shall contain the following information:

- a. Name, mailing address and telephone number, e-mail address and fax number of the owner (and facility operator, if different from the owner) applying for permit coverage;
- b. Name (or other identifier), address, city or county, contact name, phone number, e-mail address and fax number for the facility for which the registration statement is submitted;
- c. VPDES permit numbers for all permits assigned to the facility, or pursuant to which the discharge is authorized;
- d. If applying for an aggregated waste load allocation in accordance with Part I B 2 of this permit, list all affected facilities and the VPDES permit numbers assigned to these facilities;
- e. For new and expanded facilities, a plan to offset new or increased delivered total nitrogen and delivered total phosphorus loads, including the amount of waste load allocation acquired. Waste load allocations sufficient to offset projected nutrient loads must be provided for period of at least five years; and
- f. For existing facilities, the amount of a facility's waste load allocation transferred to or from another facility to offset new or increased delivered total nitrogen and delivered total phosphorus loads from a new discharge or expansion.

2. The registration statement shall be submitted to the DEQ Central Office, Office of Water Permits and Compliance Assistance.

3. An amended registration statement shall be submitted upon the acquisition or transfer of a facility's waste load allocation to offset new or increased delivered total nitrogen and delivered total phosphorus loads from a new discharge or expansion.

I. Public notice for registration statements proposing modifications or incorporations of new waste load allocations or delivery factors.

1. All public notices issued pursuant to a proposed modification or incorporation of a (i) new waste load allocation to offset new or increased delivered total nitrogen and delivered total phosphorus loads from a new discharge or expansion, or (ii) delivery factor, shall be published once a week for two consecutive weeks in a major local newspaper of general circulation serving the locality where the facility is located informing the public that the facility intends to apply for coverage under this general permit. At a minimum, the notice shall include:

- a. A statement of the owner or operator's intent to register for coverage under this general permit;
- b. A brief description of the facility and its location;
- c. The amount of waste load allocation that will be acquired or transferred if applicable;
- d. The delivery factor for a new discharge or expansion;
- e. A statement that the purpose of the public participation is to acquaint the public with the technical aspects of the facility and how the standards and the requirements of this chapter will be met, to identify issues of concern, to facilitate communication and to establish a dialogue between the owner or operator and persons who may be affected by the facility;
- f. An announcement of a 30-day comment period and the name, telephone number, and address of the owner's or operator's representative who can be contacted by the interested persons to answer questions;

- g. The name, telephone number, and address of the DEQ representative who can be contacted by the interested persons to answer questions, or where comments shall be sent; and
 - h. The location where copies of the documentation to be submitted to the department in support of this general permit notification and any supporting documents can be viewed and copied.
- 2. The owner or operator shall place a copy of the documentation and support documents in a location accessible to the public in the vicinity of the proposed facility.
 - 3. The public shall be provided 30 days to comment on the technical and the regulatory aspects of the proposal. The comment period will begin on the date the notice is published in the local newspaper.

J. Compliance with waste load allocations.

- 1. Methods of compliance. The permitted facility shall comply with its waste load allocation contained in the registration list maintained by the department. The permitted facility shall be in compliance with its waste load allocation if:
 - a. The annual mass load is less than or equal to the applicable waste load allocation assigned to the facility in this general permit (or permitted design capacity for expanded facilities without allocations);
 - b. The permitted facility acquires sufficient point source nitrogen or phosphorus credits in accordance with subdivision 2 of this subsection; provided, however, that the acquisition of nitrogen or phosphorus credits pursuant to this section shall not alter or otherwise affect the individual waste load allocations for each permitted facility; or
 - c. In the event it is unable to meet the individual waste load allocation pursuant to subdivision 1 a or 1 b of this subsection, the permitted facility acquires sufficient nitrogen or phosphorus credits through payments made into the Water Quality Improvement Fund pursuant to subdivision 3 of this subsection; provided, however, that the acquisition of nitrogen or phosphorus credits pursuant to this section shall not alter or otherwise affect the individual waste load allocations for each permitted facility.
- 2. Credit acquisition from permitted facilities. A permittee may acquire point source nitrogen credits or point source phosphorus credits from one or more permitted facilities with waste load allocations in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C and 9VAC25-720-120 C of the Water Quality Management Planning Regulation, including the Blue Plains wastewater treatment facility operated by the District of Columbia Water and Sewer Authority, only if:
 - a. The credits are generated and applied to a compliance obligation in the same calendar year;
 - b. The credits are generated by one or more permitted facilities in the same tributary, except that permitted facilities in the Eastern Shore basin may also acquire credits from permitted facilities in the Potomac and Rappahannock tributaries. Eastern shore facilities may acquire credits from the Potomac tributary at a trading ratio of 1:1. A trading ratio of 1.3:1 shall apply to the acquisition of credits from the Rappahannock tributary by an Eastern Shore facility;
 - c. The exchange or acquisition of credits does not affect any requirement to comply with local water quality-based limitations as determined by the board;
 - d. The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;
 - e. The credits are generated by a facility that has been constructed, and has discharged from treatment works whose design flow or equivalent industrial activity is the basis for the facility's waste load allocations (until a facility is constructed and has commenced operation, such credits are held, and may be sold, by the Water Quality Improvement Fund; and
 - f. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on a credit exchange notification form supplied by the department that he has acquired sufficient credits to satisfy his compliance obligations. The permittee shall comply with the terms and conditions contained in the credit exchange notification form submitted to the department.

3. Credit acquisitions from the Water Quality Improvement Fund. Until such time as the board finds that no allocations are reasonably available in an individual tributary, permittees that cannot meet their total nitrogen or total phosphorus effluent limit may acquire nitrogen or phosphorus credits through payments made into the Virginia Water Quality Improvement Fund established in § 10.1-2128 of the Code of Virginia only if, no later than June 1 immediately following the calendar year in which the credits are to be applied, the permittee certifies on a form supplied by the department that he has diligently sought, but has been unable to acquire, sufficient credits to satisfy his compliance obligations through the acquisition of point source nitrogen or phosphorus credits with other permitted facilities, and that he has acquired sufficient credits to satisfy his compliance obligations through one or more payments made in accordance with the terms of this general permit. Such certification may include, but not be limited to, providing a record of solicitation or demonstration that point source allocations are not available for sale in the tributary in which the permittee is located. Payments to the Water Quality Improvement Fund shall be in the amount of \$6.04 for each pound of nitrogen and \$15.08 for each pound of phosphorus and shall be subject to the following requirements:

- a. The credits are generated and applied to a compliance obligation in the same calendar year,
- b. The credits are generated in the same tributary, except that permitted facilities in the Eastern Shore basin may also acquire credits from the Potomac and Rappahannock tributaries. Eastern shore facilities may acquire credits from the Potomac tributary at a trading ratio of 1:1. A trading ratio of 1.3:1 shall apply to the acquisition of credits from the Rappahannock tributary by an Eastern Shore facility.
- c. The acquisition of credits does not affect any requirement to comply with local water quality-based limitations, as determined by the board.

4. This general permit neither requires, nor prohibits a municipality or regional sewerage authority's development and implementation of trading programs among industrial users, which are consistent with the pretreatment regulatory requirements at 40 CFR Part 403 and the municipality's or authority's individual VPDES permit.

Part II

Special Conditions Applicable To New And Expanded Facilities

A. Offsetting mass loads discharged by new and expanded facilities.

1. An owner or operator of a new or expanded facility shall comply with the applicable requirements of this section as a condition of the facility's coverage under this general permit.

- a. An owner or operator of a facility authorized by a Virginia Pollutant Discharge Elimination System permit first issued before July 1, 2005, that expands his facility to discharge 40,000 gallons or more per day, or an equivalent load, shall demonstrate to the department that he has acquired waste load allocations sufficient to offset any increase in his delivered total nitrogen and delivered total phosphorus loads resulting from any expansion beyond his permitted capacity as of July 1, 2005.
- b. An owner or operator of a facility authorized by a Virginia Pollutant Discharge Elimination System permit first issued on or after July 1, 2005, to discharge 40,000 gallons or more per day, or an equivalent load, shall demonstrate to the department that he has acquired waste load allocations sufficient to offset his delivered total nitrogen and delivered total phosphorus loads.
- c. An owner or operator of a facility treating domestic sewage authorized by a Virginia Pollutant Discharge Elimination System permit with a discharge greater than 1,000 gallons per day up to and including 39,999 gallons per day that has not commenced the discharge of pollutants prior to January 1, 2011, shall demonstrate to the department that he has acquired waste load allocations sufficient to offset his delivered total nitrogen and delivered phosphorus loads prior to commencing the discharge, except when the facility is for short-term temporary use only or when treatment of domestic sewage is not the primary purpose of the facility.

2. Offset calculations shall address the proposed discharge that exceeds:

- a. The applicable waste load allocation assigned to the facility in this general permit, for expanding significant dischargers with a waste load allocation listed in 9VAC25-720-50 C, 9VAC25-720-60 C, 9VAC25-720-70 C, 9VAC25-720-110 C, and 9VAC25-720-120 C of the Water Quality Management Planning Regulation;
- b. The permitted design capacity, for all other expanding dischargers; and
- c. Zero, for facilities with a new discharge.

3. An owner or operator of multiple facilities located in the same tributary, and assigned an aggregate mass load limit in accordance with Part I B 2 of this general permit, that undertakes construction of new or expanded facilities, shall be required to acquire waste load allocations sufficient to offset any increase in delivered total nitrogen and delivered total phosphorus loads resulting from any expansion beyond the aggregate mass load limit assigned these facilities.

B. Acquisition of waste load allocations. Waste load allocations required by this section to offset new or increased delivered total nitrogen and delivered total phosphorus loads shall be acquired in accordance with this section.

1. Such allocations may be acquired from one or a combination of the following:

- a. Acquisition of all or a portion of the waste load allocations from one or more permitted facilities, based on delivered pounds by the respective trading parties as listed by the department;
- b. Acquisition of nonpoint source load allocations, using a trading ratio of two pounds reduced for every pound to be discharged, through the use of best management practices that are:

- (1) Acquired through a public or private entity acting on behalf of the land owner;
- (2) Calculated using best management practices efficiency rates and attenuation rates, as established by the latest science and relevant technical information, and approved by the board;
- (3) Based on appropriate delivery factors, as established by the latest science and relevant technical information, and approved by the board;
- (4) Demonstrated to have achieved reductions beyond those already required by or funded under federal or state law, or by the Virginia tributaries strategies plans;
- (5) Included as conditions of the facility's individual Virginia Pollutant Discharge Elimination System permit; and
- (6) In the case of allocations generated by land use conversions and urban source reduction controls (BMPs), beyond those in place as of July 1, 2005.

c. Until such time as the board finds that no allocations are reasonably available in an individual tributary, acquisition of allocations through payments made into the Virginia Water Quality Improvement Fund established in § 10.1-2128 of the Code of Virginia; or

d. Acquisition of allocations through such other means as may be approved by the department on a case-by-case basis. This includes allocations granted by the board to an owner or operator of a facility that is authorized by a VPA permit to land apply domestic sewage if:

- (1) The VPA permit was issued before July 1, 2005;
- (2) The allocation does not exceed the facility's permitted design capacity as of July 1, 2005;
- (3) The waste treated by the facility that is covered under the VPA permit will be treated and discharged pursuant to a VPDES permit for a new discharge; and
- (4) The owner or operator installs state-of-the-art nutrient removal technology at such a facility.

2. Acquisition of allocations is subject to the following conditions:

- a. The allocations shall be generated and applied to an offset obligation in the same calendar year;
- b. The allocations shall be generated in the same tributary;
- c. Such acquisition does not affect any requirement to comply with local water quality-based limitations, as determined by the board;
- d. The allocations are authenticated (i.e., verified to have been generated) by the permittee as required by the facility's individual Virginia Pollutant Discharge Elimination permit, utilizing procedures approved by the board, no later than February 1 immediately following the calendar year in which the allocations are applied; and
- e. If obtained from a permitted point source, the allocations shall be generated by a facility that has been constructed, and has discharged from treatment works whose design flow or equivalent industrial activity is the basis for the facility's waste load allocations.

3. Priority of options. The board shall give priority to allocations acquired in accordance with subdivisions 1 a and 1 b of this subsection. The board shall approve allocations acquired in accordance with subdivisions 1 c and 1 d of this subsection only after the owner or operator has demonstrated that he has made a good faith effort to acquire sufficient allocations in accordance with subdivisions 1 a and 1 b of this subsection, and that such allocations are not reasonably available taking into account timing, cost and other relevant factors. Such demonstration may include, but not be limited to, providing a record of solicitation, or other demonstration that point source allocations or nonpoint source allocations are not available for sale in the tributary in which the permittee is located.

4. Annual allocation acquisitions from the Water Quality Improvement Fund. The cost for each pound of nitrogen and each pound of phosphorus shall be determined at the time payment is made to the WQIF, based on the higher of (i) the estimated cost of achieving a reduction of one pound of nitrogen or phosphorus at the facility that is securing the allocation, or comparable facility, for each pound of allocation acquired; or (ii) the average cost, as determined by the Department of Conservation and Recreation on an annual basis, of reducing two pounds of nitrogen or phosphorus from nonpoint sources in the same tributary for each pound of allocation acquired.

Part III

Conditions Applicable To All VPDES Permits

A. Duty to comply. The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the law and the Clean Water Act, except that noncompliance with certain provisions of the permit may constitute a violation of the law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

B. Duty to register for reissued general permit. If the permittee wishes to continue an activity regulated by the general permit after its expiration date, the permittee must register for coverage under the new general permit, when it is reissued by the department.

C. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

D. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G. Property rights. Permits do not convey any property rights of any sort, or any exclusive privilege.

H. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information that the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the law. The permittee shall also furnish to the department upon request, copies of records required to be kept by the permit, pertaining to activities related to the permitted facility.

I. Inspection and entry. The permittee shall allow the director, or an authorized representative (including an authorized contractor acting as a representative of the administrator), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the law, any substances or parameters at any location.

J. Monitoring and records.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.
3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
4. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136, or alternative EPA-approved methods, unless other test procedures have been specified in the permit.

K. Signatory requirements. All applications, reports, or information submitted to the department shall be signed and certified as required by 9VAC25-31-110.

L. Reporting requirements.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 9VAC25-31-180 A; or
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under 9VAC25-31-200 A 1.
2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
3. Permits are not transferable to any person except after notice to the department. The board may require modification or revocation and reissuance of permits to change the name of the permittee and incorporate such other requirements as may be necessary under the law or the Clean Water Act.
4. Monitoring results shall be reported at the intervals specified in the permit.
 - a. Monitoring results must be reported on a Discharge Monitoring Report (DMR).
 - b. If the permittee monitors any pollutant specifically addressed by the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 , or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR specified by the department.
 - c. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
5. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.
6. If any unusual or extraordinary discharge including a bypass or upset should occur from a facility and such discharge enters or could be expected to enter state waters, the owner shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of such discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with subdivision 7 a of this subsection. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:
 - a. Unusual spillage of materials resulting directly or indirectly from processing operations;
 - b. Breakdown of processing or accessory equipment;
 - c. Failure or taking out of service of the treatment work or auxiliary facilities (such as sewer lines or wastewater pump stations); and
 - d. Flooding or other acts of nature.
7. Twenty-four-hour reporting.
 - a. The permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its

cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

b. The following shall be included as information that must be reported within 24 hours under this subdivision.

(1) Any unanticipated bypass that exceeds any effluent limitation in the permit.

(2) Any upset that exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.

c. The board may waive the written report on a case-by-case basis for reports under this subdivision if the oral report has been received within 24 hours.

8. The permittee shall report all instances of noncompliance not reported under subdivisions 4, 5, 6, and 7 of this subsection, in writing at the time the next monitoring reports are submitted. The reports shall contain the information listed in subdivision 7 of this subsection.

9. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or information.

M. Bypass.

1. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of subdivisions 2 and 3 of this subsection.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in subdivision L 7 of this section (24-hour notice).

3. Prohibition of bypass.

a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under subdivision 2 of this subsection.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed above in subdivision 3 a of this subsection.

N. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of subdivision 2 of this subsection are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in subdivision L 7 b (2) of this section (24-hour notice); and
 - d. The permittee complied with any remedial measures required under subsection D of this section.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.